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TI Processing of copper alloys for high strength, electric conductivity, and bendability

IN Hirano, Yasuo

PA Nippon Mining Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

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| PI   | JP 03162553  | A2   | 19910712 | JP 1989-302005  | 19891122 |
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| AB   | Cu-(04-4.0) Ni-(0.1-1.0)% Si alloys are<br>soln. treated at $\geq 700^\circ$ for grain size 1-10 $\mu\text{m}$ ,<br>cold rolled at draft <40%, and aged at 300-700 $^\circ$ to increase<br>strength, elec. cond, and bendability. The alloys optionally contain<br>0.001-2.0% of Fe, Mg, Al, Cr, Mn, Co, Zn, Ti, Zr, Pb, Cd, In, Ag, and/or<br>P, and are used for elec. applications. Thus, a Cu-1.6<br>Ni-0.4% Si alloy processed according to the invention<br>showed tensile strength 55 kg/mm <sup>2</sup> , elongation 15%, and elec. conductivity 50% |      |          |                 |          |

of

Cu standard